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Dental Electrotherapeutics

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Apparatus

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INCORPORATED
1915



GENERAL OFFICES AND FACTORY
401-405 East 31st Street, New York

CATALOGUE A

DENTAL X-RAY APPA-
RATUS AND ACCESSORIES



AMERICAN X-RAY EQUIPMENT CO.
INCORPORATED

401-405 East 31st Street - - - NEW YORK

29 East Madison Street - - - CHICAGO

Introduction

*The Value of
the Dental
Radiograph.*

THE progressive dentist appreciates the great value of the X-ray, for it means the elimination of guess-work, and enables him to give better service to his patients. The many important uses of the X-ray are known to the majority of the profession, as there is scarcely an issue of any of the dental journals which does not contain articles illustrated by the radiograph. We shall not describe here the many uses of the dental radiograph, but instead we refer you to the two text-books listed on page 37 of this catalogue.



*Dental X-Ray
Apparatus.*

X-RAY apparatus for the physician's use has been on the market for a number of years, but not until, about two years ago, when we designed the apparatus shown in this catalogue was there on the market a real dental X-ray machine. By this we mean, an apparatus which was designed strictly for the use of the dentist. We were aided in the development of our dental X-ray outfits by a teacher of twelve years' experience in dental radiology. The result is that we have produced an X-ray equipment for the dentist that is simple to operate, compact and efficient, attractive in design and moderate in cost. The outfits are so designed that they work from any electric circuit supplying 110 to 220 volts direct or alternating current, without the need of any kind of converter or rectifier. Our aim is to make and supply only the best, and as a result a number of the most prominent dentists and dental colleges in the United States and in foreign countries are using our standard X-ray equipment.



*Complete
Dental X-Ray
Outfit.*

FOR those who are unfamiliar with radiographic apparatus a brief description will not be out of place. A complete dental X-ray outfit consists of four distinct things: They are, (1) the apparatus for generating the high potential

X-ray current; (2) the X-ray tube for producing the X-rays; (3) the X-ray tube stand for holding the X-ray tube, directing its rays and confining them so that no harm results to the operator; (4) photographic materials and accessories for developing the X-ray film or plate.

X-Ray Tube. The X-rays are produced by the passage of an electric current through a highly exhausted glass tube (known as the X-ray tube), having two specially constructed electrodes (anode and cathode) between which the current passes. The X-ray tube has had the air pumped out of it and offers a high resistance to the passage of an electric current. Therefore, an electric current of high potential (high pressure) is needed to force the passage of electricity through the X-ray tube.

Coil and Interrupter. We use an induction coil with an electrolytic interrupter to produce the high-potential current. About 30 amperes of low potential current of 110 to 220 volts pressure is interrupted and thereby transformed into 10 to 20 milliamperes of high-potential current of from 50,000 to 100,000 volts pressure.

Valve Tube. In order that the electric current passing through an X-ray tube produces useful X-rays, the current must flow in one fixed direction only. The high electric pressure produced by an induction coil and interrupter is not altogether uni-directional, and for this reason a valve tube is placed in series with the X-ray tube to prevent any current from flowing in the wrong direction.

Milliammeter and Spark Gap. The milliammeter shows the amount of current passing through the X-ray tube, thus indicating the relative quantity of X-rays produced. The quality of the X-rays or their relative penetration is measured by the spark-gap which the X-ray tube "backs up," that is, the number of inches the spark gap is open when the current jumps across the spark gap in preference to flowing through the X-ray tube.

*Resistance
Unit.*

The resistance unit is put in the primary circuit to reduce the current so that the X-ray tube, whenever required, may be regulated gradually. The resistance is short circuited by a switch when the full power is desired for taking the radiographs.

The electrical relationship of the different parts which are used to make up our X-ray Coil Outfit is shown on page 26.

*Our Models
of Dental
X-Ray Coil
Machines.*

OUR Model "S" 8" X-ray coil machine will take radiographs of the teeth and the jaws in less than ten seconds. Models "L" and "M," and our "Wall Model" 12" X-ray coil machines are powerful enough to take frontal sinus radiographs, the most difficult of all radiographs, in an exposure of about ten seconds, and radiographs of the teeth can be taken, if desired, in a fraction of a second with a fast film. With the regular slow film the exposure required is from three to five seconds.

If you wish to take all kinds of dental radiographs including head pictures, we recommend our 12" X-ray coil machine. With our 8" coil we do not guarantee perfect frontal sinus radiographs, although it is possible to obtain fairly good frontal sinus pictures with this machine by giving longer exposures. We do guarantee, however, that as good radiographs of the teeth can be obtained with any of our machines as can be obtained from any of the larger or more expensive machines on the market. The explanation of this is as follows:

*Requirements
for Taking
Good
Radiographs.*

JUST as the essential requirements for the taking of a good photograph are proper light and exposure, and no movement during the exposure, so the requirements for the taking of a perfect radiograph are good qualities of X-rays, proper exposure and no movement during exposure. If the X-rays have the proper degree of penetration the radiograph can be a perfect one no matter how long an exposure is required, provided there

is no movement of any kind during the exposure. Of course, the longer the exposure, the greater are the chances that there will be movement, but experience has shown that in nearly all cases the dental X-ray film can be held in the mouth by the patient for a number of seconds without the film or the patient moving. Therefore, the very powerful machines used by the X-ray specialists and in the hospitals are not needed by the dentists. For radiographing the internal organs such as the chest, the heart, and the stomach, the very powerful machines are better because they permit the taking of such radiographs in a flash or fractional part of a second. This short exposure is necessary because these parts have involuntary movements. It is, therefore, only for general work of this kind and not for dental work that the large machines are needed.



Very Short Exposures.

WHILE the use of very short exposures in dental X-ray work has the advantage of no movement of the film, it has the disadvantage of the exposure not being so accurate. For example, if the correct exposure in a certain case should be one second, and we give an exposure of only half a second more than necessary, or one and a half seconds, the film is fifty per cent. overexposed. Again, if the correct exposure should be five seconds, and we give five and a half seconds, the film is only ten per cent. overexposed. Of course, the same reasoning applies to underexposure. You can, therefore, see that more uniform results can be obtained in dental radiography when the exposures are not confined to such short limits.



Tube Stands.

OUR Dental X-Ray Tube Stand, No. 108, meets all the requirements for properly radiographing the teeth. Certain additional advantages, however, can be gained by using the counter-weighted stand, No. 109. For radiographing all parts of the head the Schamberg Model tube stand, No. 110 has no equal. We refer you to plates Nos. 10 and 11 on pages 24 and 25,

which show how easily the proper relative position for X-ray tube and X-ray plate may be obtained with comfort to the patient. Plate No. 11 shows how, with a cloth bandage, the patient's head is clamped so it is impossible for it to move during the exposure.

Plates Nos. 8 and 9 on pages 18 and 19 show tube holders mounted on X-ray coil cabinets. This arrangement may be the most practical in very small offices where a separate tube stand would be in the way. The main disadvantage of this arrangement is that the entire cabinet must be moved up to the chair to take the radiograph, and therefore the X-ray tube cannot be adjusted for the proper angle with the same ease and speed as when a separate tube stand is employed. We recommend a separate tube stand whenever its use is possible.

The finish on our tube stands can be made to match any of our X-ray coil cabinets, thus making the whole outfit harmonize.

*Protective
Shields.*

All tube stands are supplied with lead glass shields and Satterlee opaque rubber covers, thus confining practically all but the useful rays inside of the protective covering. The two sizes of cylinders which are supplied, confine the useful rays to the areas desired; the smaller cylinder being used with the films and the larger with the plates. The cylinders also assist the operator in properly directing the rays.



Protection.

THE pioneers in X-ray work did not know at the beginning anything about the harmful effects of repeated exposures to the X-rays and exposed themselves freely to them. For example, the fluoroscope was always used with no protection to the hands, face or other parts of the body. There was no such protection as the lead glass shield, or the lead-lined screen, and the inevitable results followed. This should not alarm the dentist as the conditions under which he works to-day with the X-ray are entirely different. By working behind a lead-lined screen the operator obtains complete and absolute protection even from the continual use of the X-rays. The film should be held in the mouth by the patient and not by the operator. The general rule is that no part of the body of the operator should be

in the direct path of the rays. Follow this rule and you will never experience any harmful effects.

The patient is not affected because he is not exposed to a sufficient quantity of the X-rays even from a number of exposures with the use of our machine. Besides we have on all our tube stands an aluminum disc for filtering the soft rays and thus preventing burns absolutely.



PHOTOGRAPHIC materials of various kinds used in dental radiography are listed in this catalogue on page 30.

A few varieties of dark room lamps are shown to meet all requirements. Where mainly dental films and small plates have to be developed, we recommend Dark Room Frosted Ruby and White Light, catalogue No. 153.

For developing large plates and where a very safe light is desired, Wratten Safelight Lamp, catalogue No. 151, is recommended.

We have designed a small dark box (see page 33) for the use of those who have no dark room or closet for developing radiographs.

We call your attention to the useful *illuminating devices* illustrated on pages 34, 35 and 36, for viewing and exhibiting radiographs.

Tube racks and a number of other useful and convenient articles are shown on pages 37 and 38.



On the last pages of the catalog we suggest a few complete equipments, including all accessories, to meet different requirements.



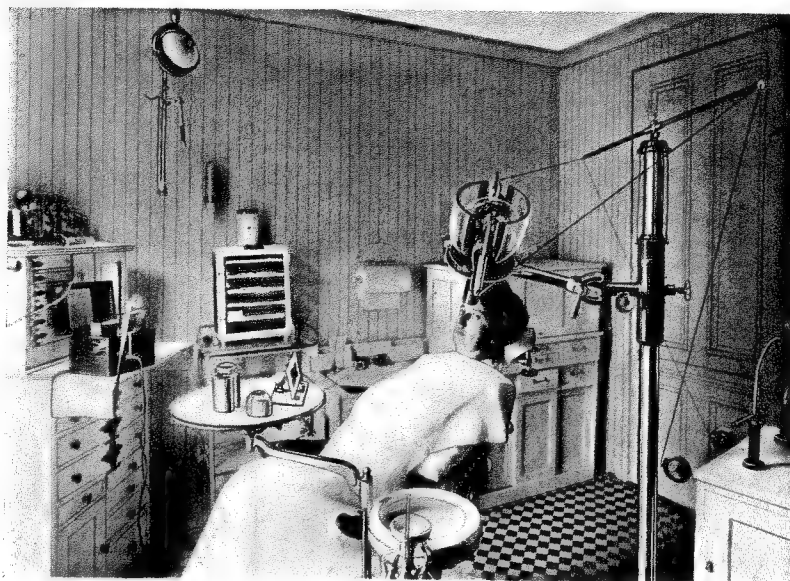


Plate No. 1.

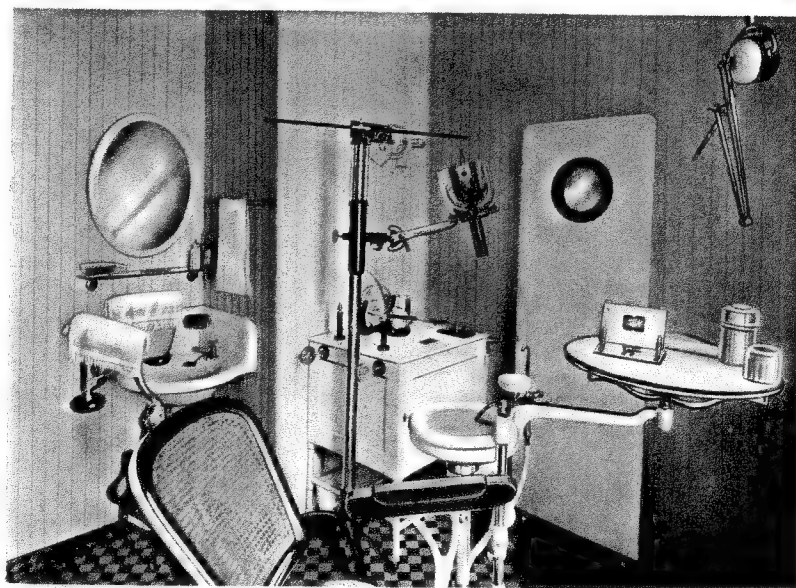


Plate No. 2.

Office of a progressive dentist, equipped with complete X-ray outfit with model "L" cabinet. The lead protection screen is hinged to X-ray coil cabinet, and the tube stand base is rolled underneath the cabinet. This arrangement requires very little floor space more than that needed for X-ray coil cabinet.

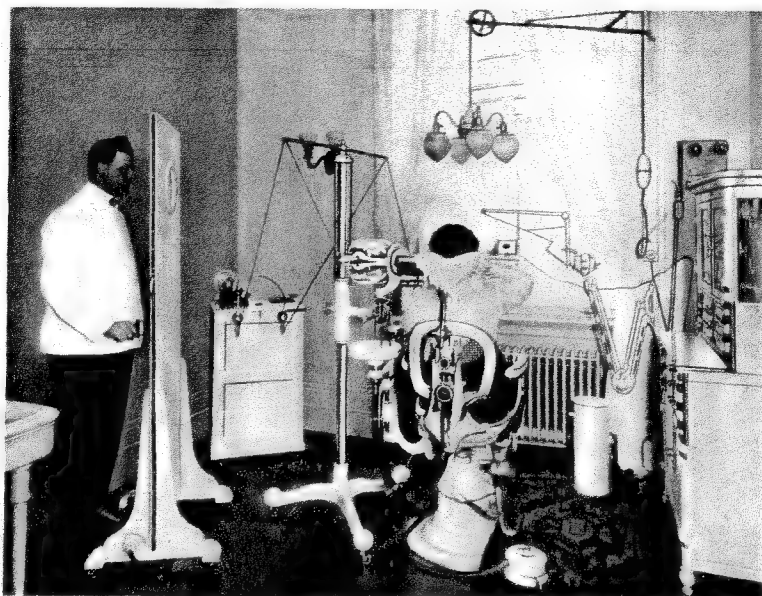


Plate No. 3.

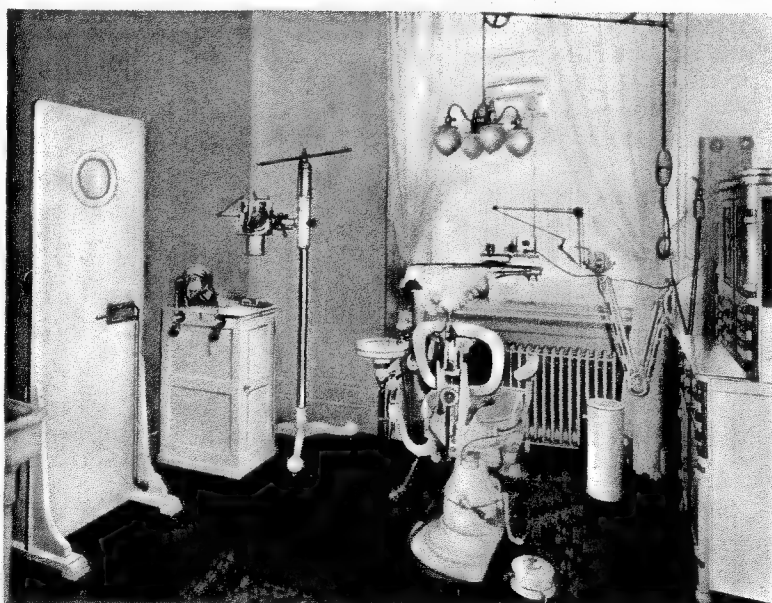
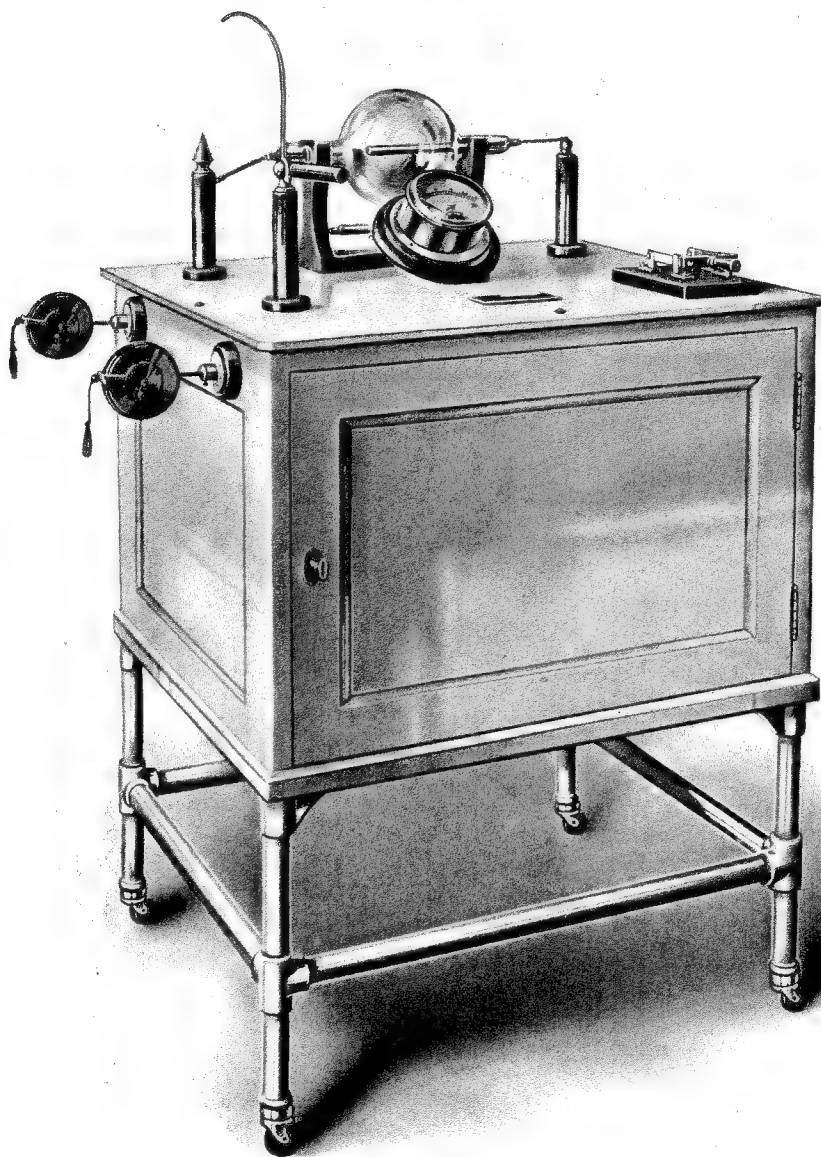


Plate No. 4.

Office of a progressive dentist, equipped with complete X-ray outfit with model "M" cabinet. The operator is completely protected by working the X-ray tube from behind the lead-lined screen.

The apparatus is placed so that it can be arranged and adjusted for taking the radiograph with ease and with speed.



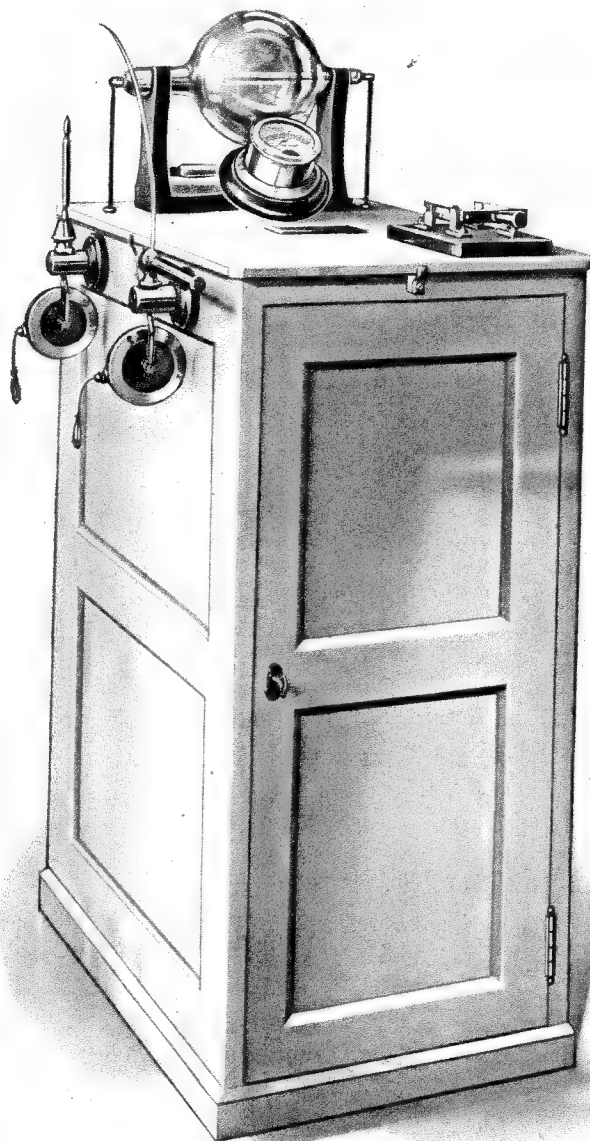
No. 101. Standard Model "L" 12" X-Ray Coil Machine.
Complete machine equipped as shown above with valve tube,
milliammeter, cord reels and 10 feet of line cable.... \$290.00



Plate No. 5.

Interior of Standard Model "L" 12" X-Ray Coil Machine.

Floor space required, 22" x 24". Height, 36".



No. 102. Standard Model "M" 12" X-Ray Coil Machine.

Complete machine equipped as shown above with
valve tube, milliammeter, cord reels and 10 feet
of line cable \$290.00

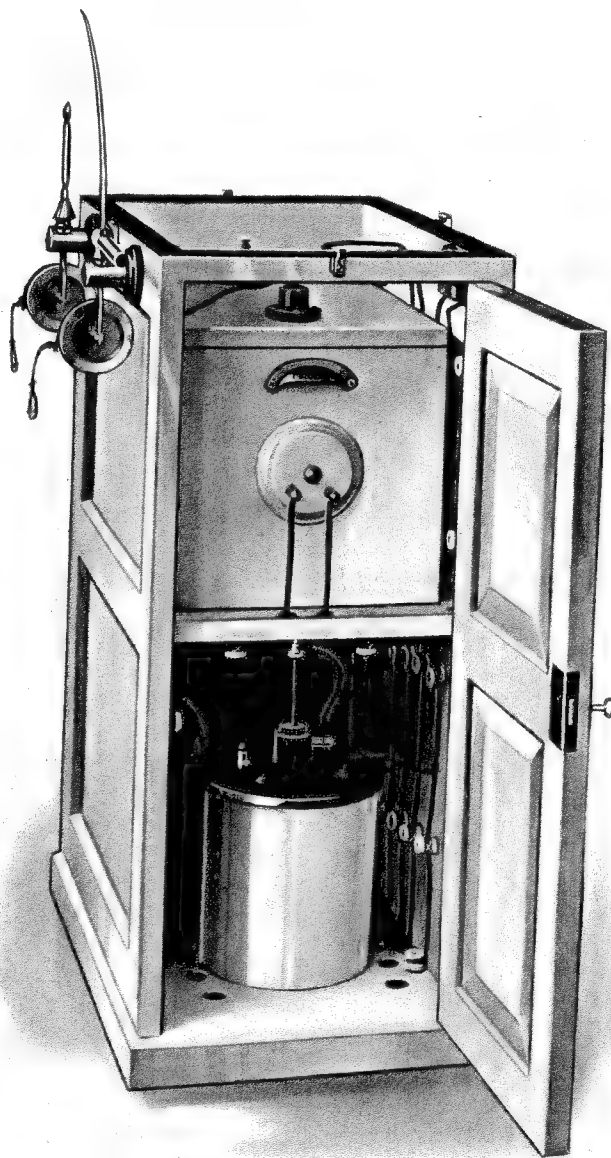


Plate No. 6.

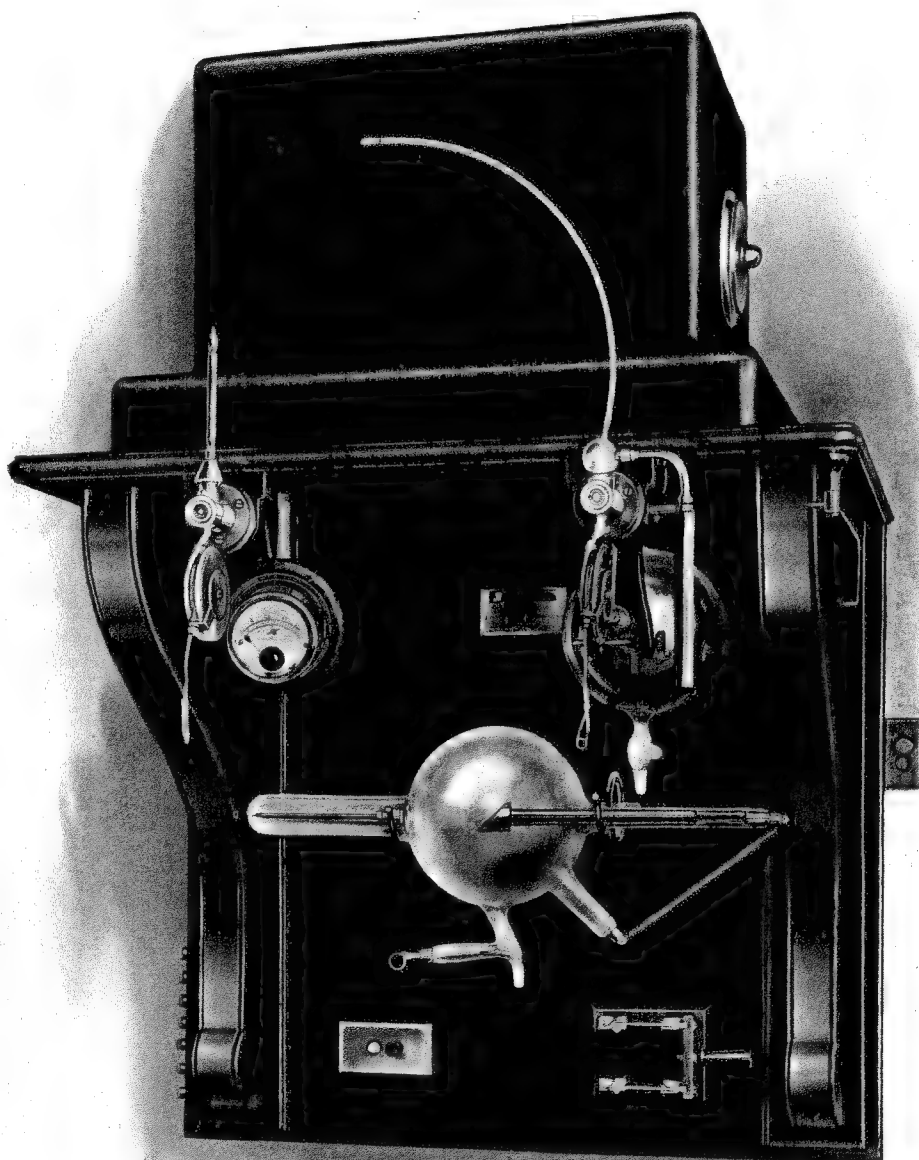
Interior of Standard Model "M" 12" X-Ray Coil Machine.
Floor space required, 15" x 23". Height, 36".



No. 103. Standard Model "S" 8" X-Ray Coil Machine.

The interior arrangement of Model "S" is the same as that of Model "M." Floor space required, 15" x 15". Height, 36".

Complete machine equipped as shown above with milliammeter, cord reels and 10 feet of line cable \$225.00



No. 104. Standard Wall Model 12" X-Ray Coil Machine.

Complete machine with valve tube, milliammeter, cord reels
and 10 feet of line cable..... \$345.00

Dimensions, 33" wide, 41" high.

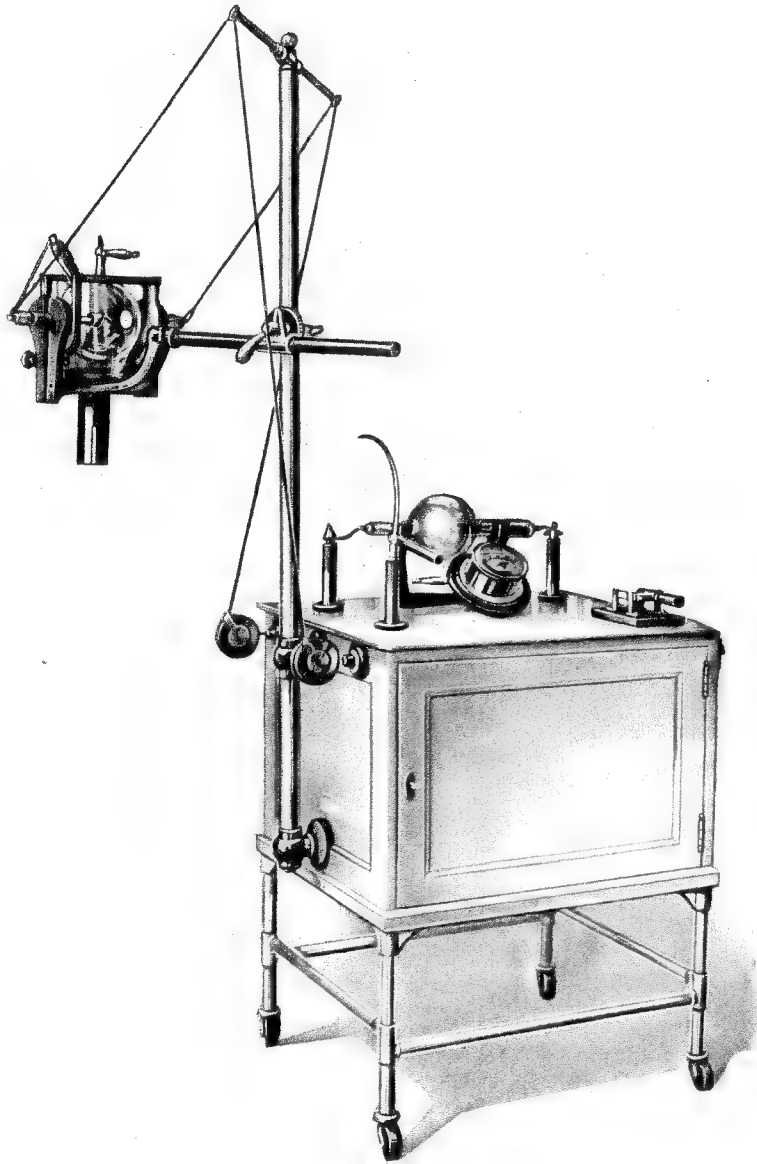


Plate No. 7.

Showing X-Ray Tube Holder, No. 105, Mounted on X-Ray Coil Cabinet.

No. 105. X-ray tube holder with lead glass shield, opaque rubber cover, and small and large cylinders..... \$35.00

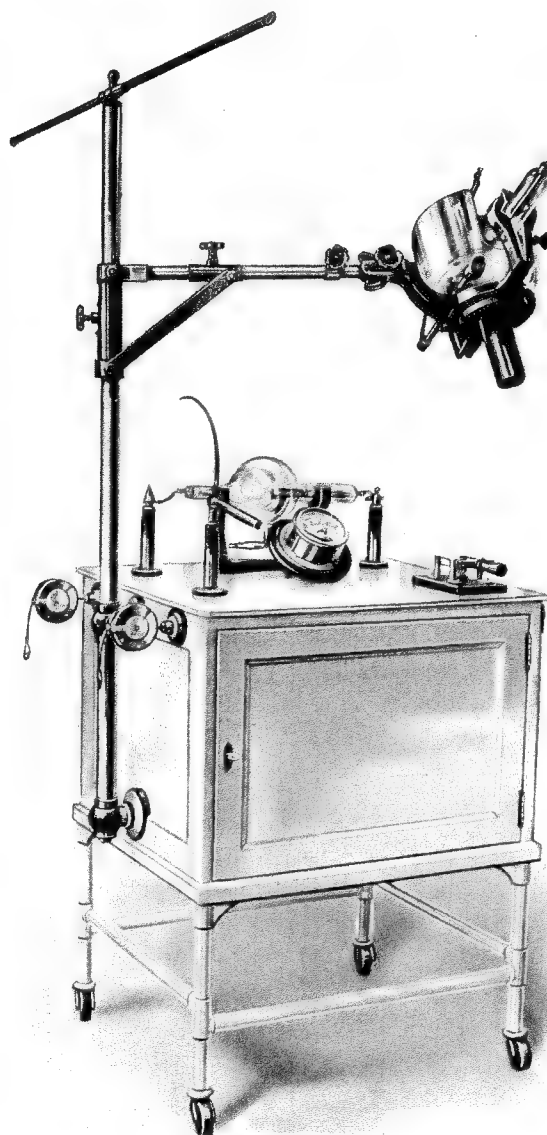
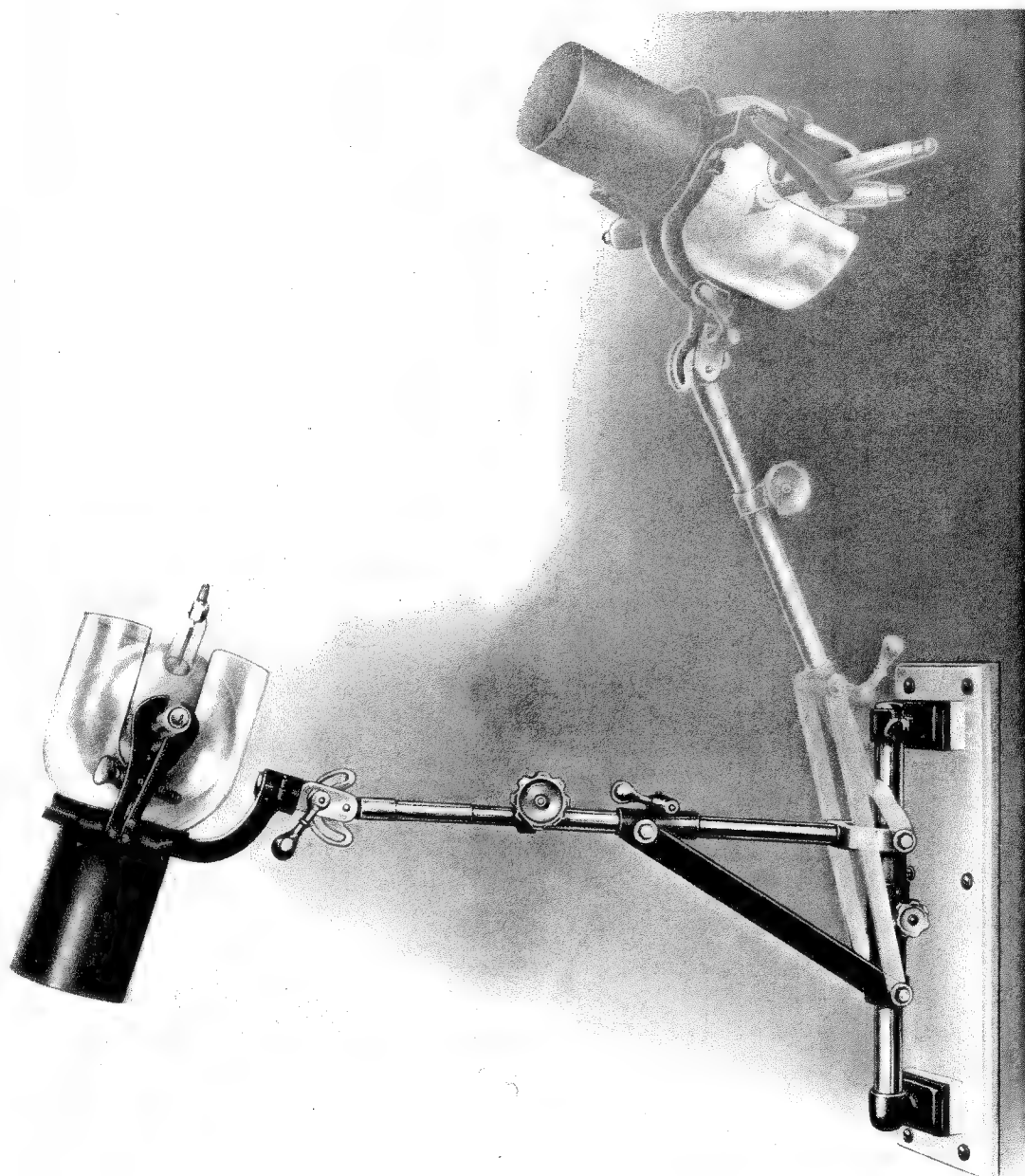


Plate No. 8.

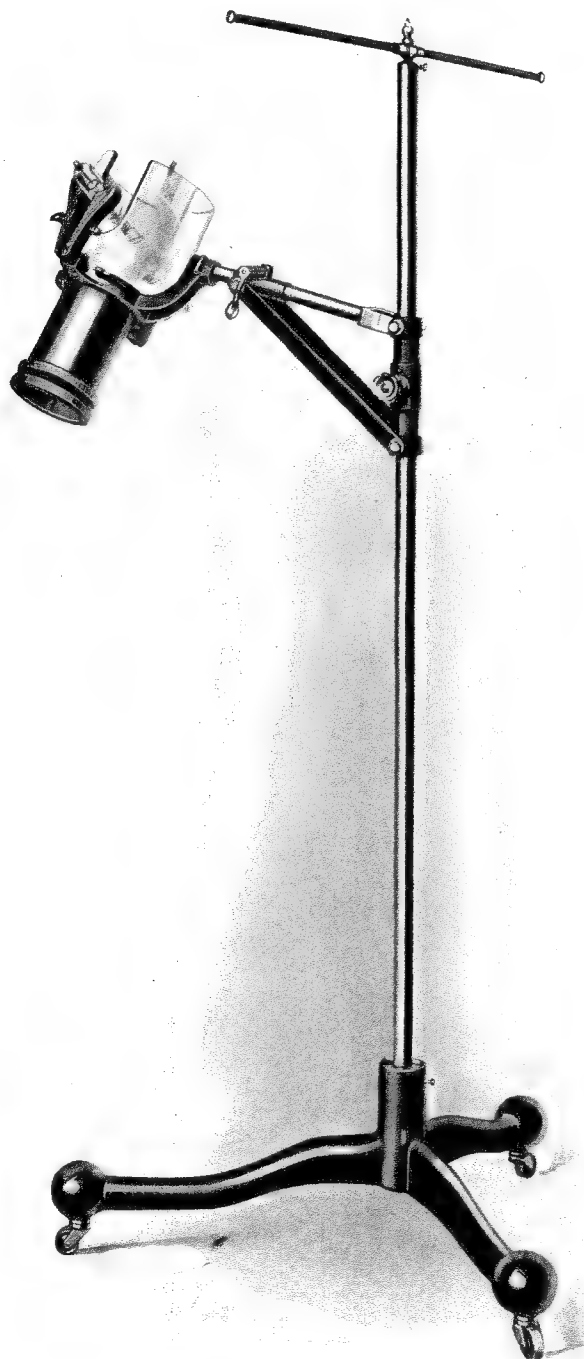
Showing the Dental X-Ray Tube Holder, No. 106, Mounted on X-Ray Coil Cabinet. When not in use its position is, as here shown, over the top of cabinet.

No. 106. Dental X-ray tube holder complete with lead glass shield, opaque rubber cover, and small and large cylinders..... \$65.00



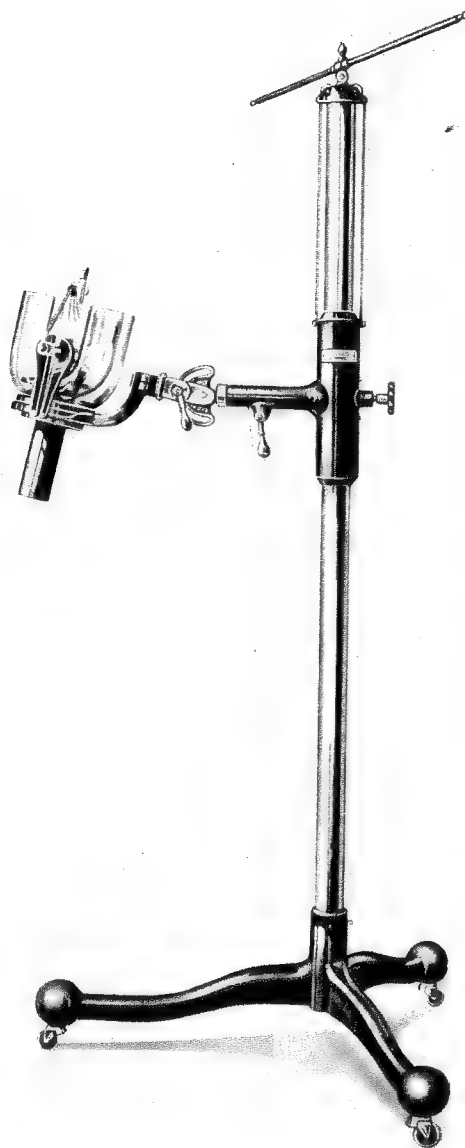
No. 107. Wall Bracket Dental X-Ray Tube Holder.

Complete with lead glass shield, opaque rubber cover, and small and
large cylinders \$70.00



No. 108. Dental X-Ray Tube Stand.

Complete with lead glass shield, opaque rubber cover, and small and large cylinders..... \$65.00



No. 109. Counter-Weighted Dental X-Ray Tube Stand.

Complete with lead glass shield, opaque rubber cover, and small and large cylinders.. \$85.00

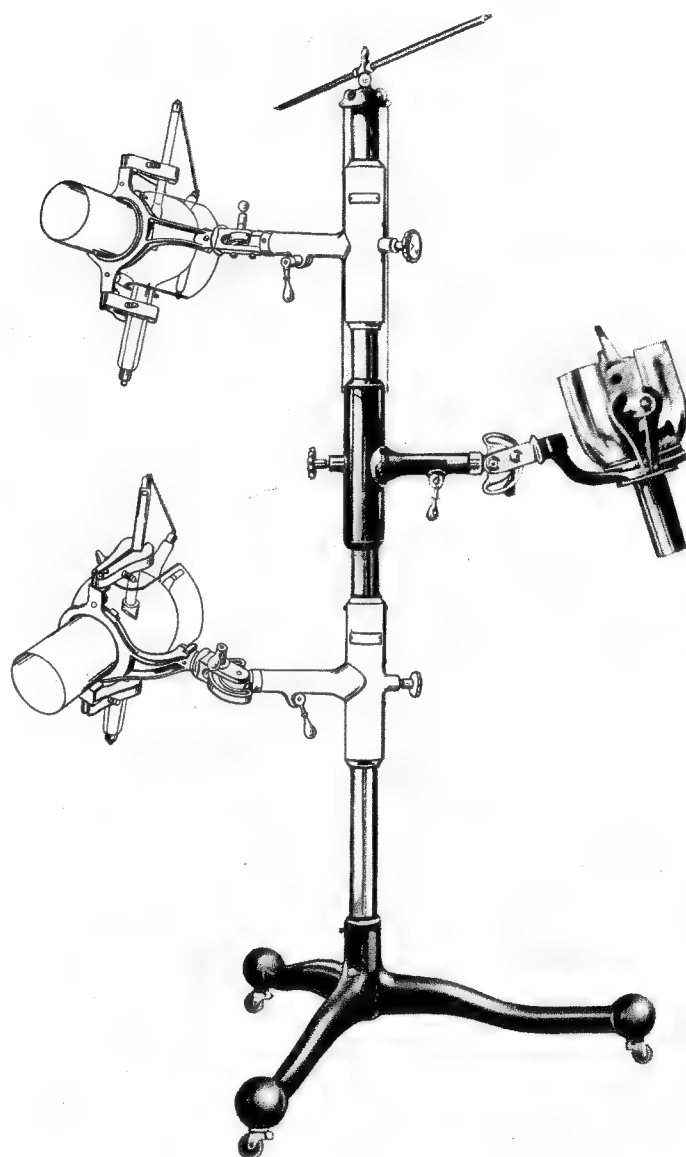


Plate No. 9.

Illustrating How Easily the X-Rays May Be Directed at Any Desired Angle.



Plate No. 10.

Showing the Schamberg Model Counter-Weighted Tube Stand, No. 110, Adjusted for Radiographing the Lower Jaw, Lateral View.

No. 110. Schamberg Model Counter-Weighted Tube Stand, complete with lead glass shield, opaque rubber cover, small and large cylinders, bracket with 8 x 10 plate holder, head bandage clamp and calibrations..... \$125.00

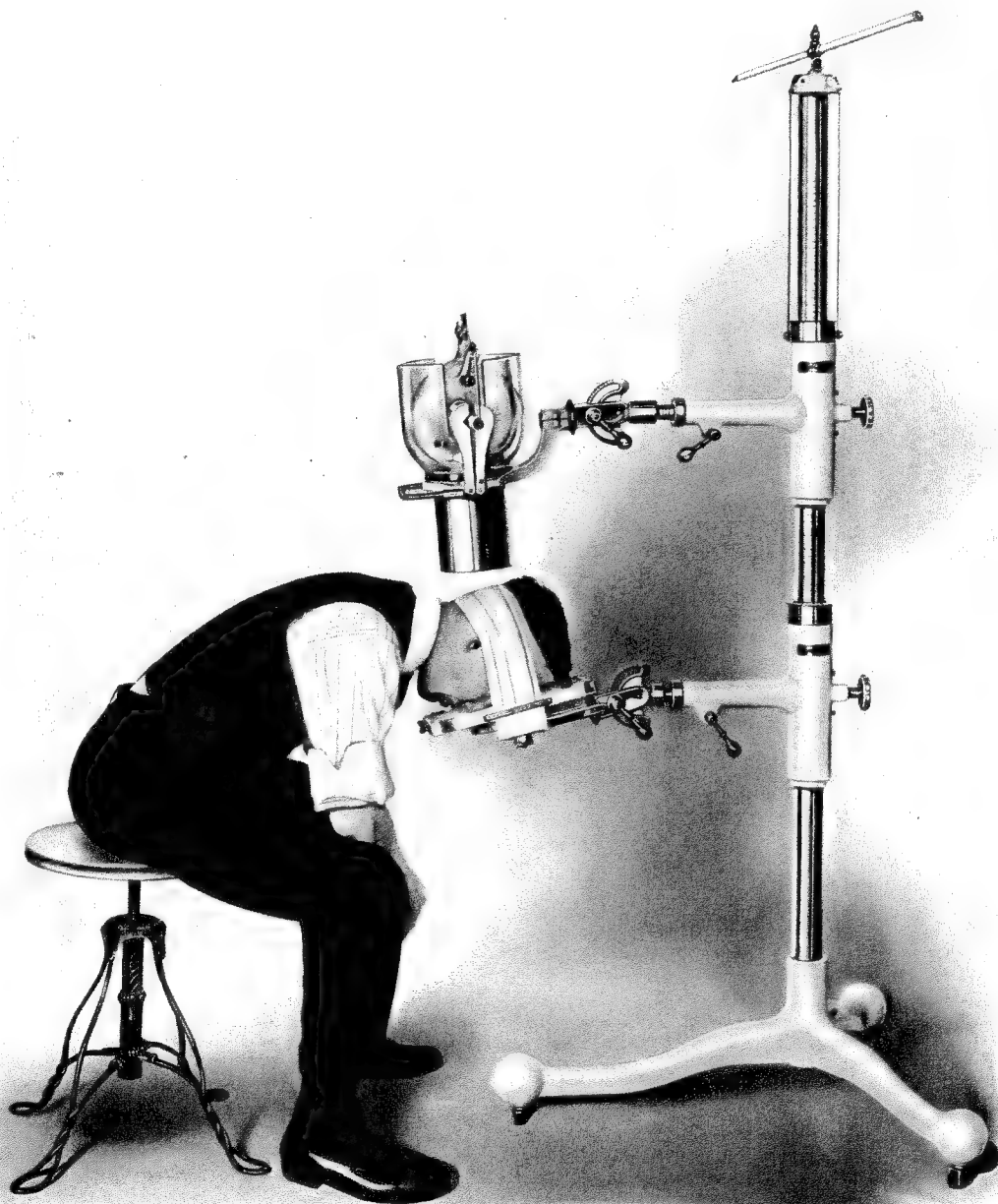


Plate No. 11.

Showing the Schamberg Model Counter-Weighted Tube Stand, No. 110, Adjusted for Radiographing the Maxillary and the Frontal Sinuses.

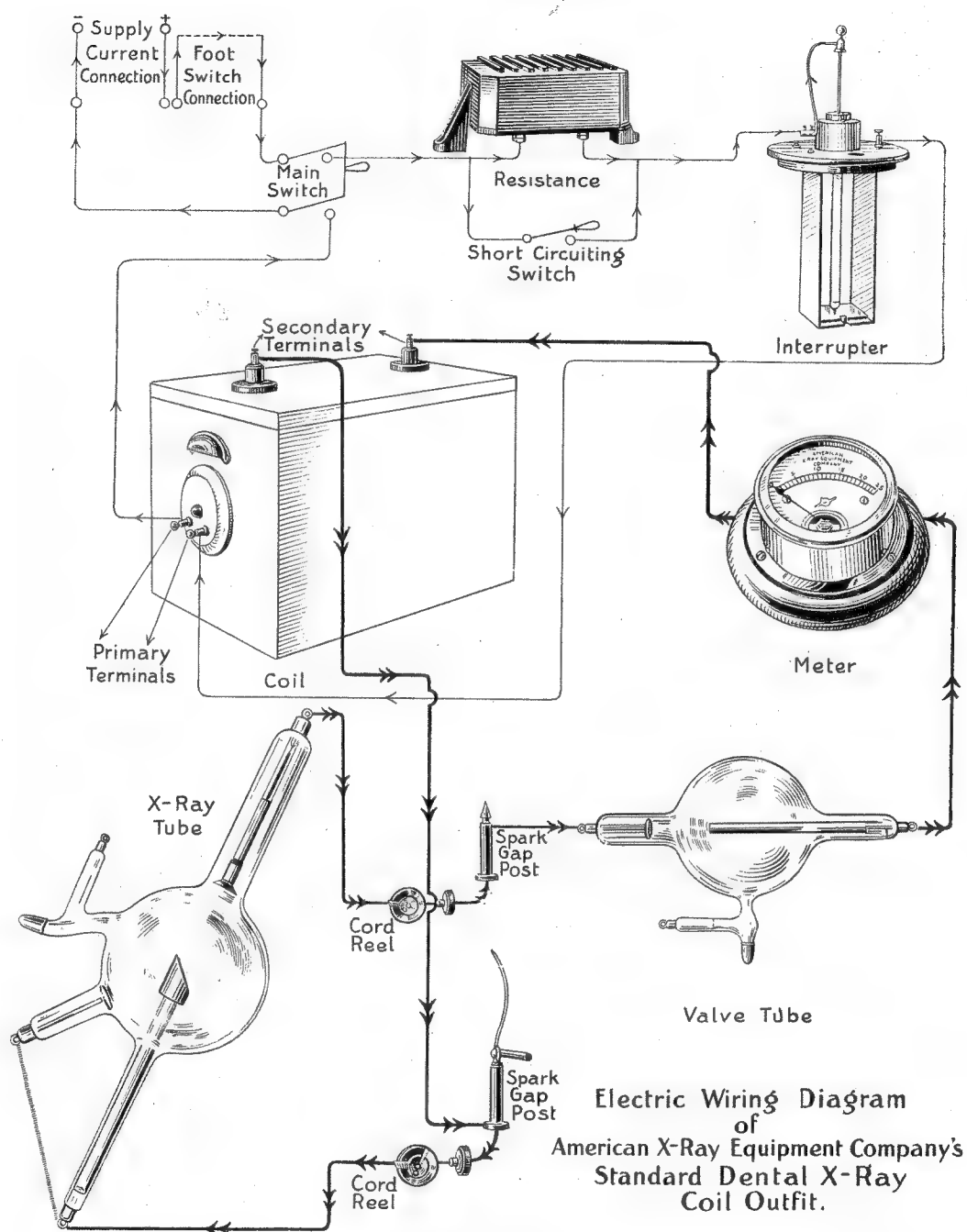
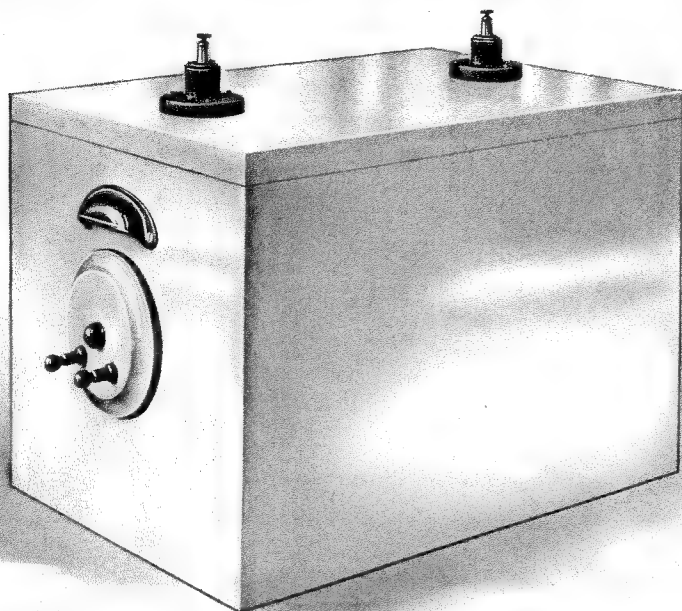


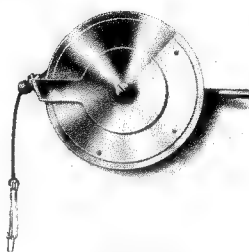
Plate No. 12.

Showing the Primary (low potential) and Secondary (high potential) Circuits. Tracing the connections by following the arrows will show the simplicity of both circuits.

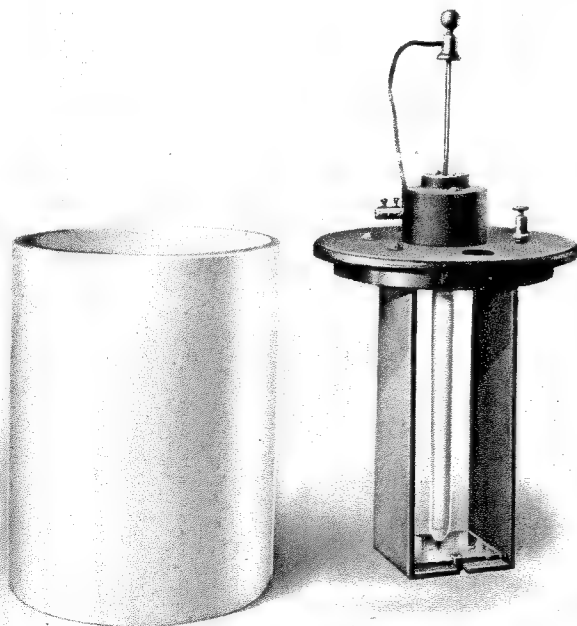


X-Ray Coil.

- No. 111. 8" X-Ray Coil..... \$100.00
 No. 112. 12" X-Ray Coil..... \$150.00



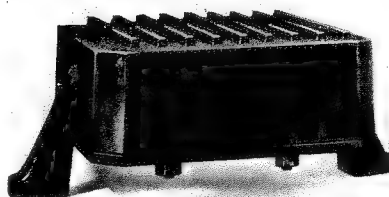
No. 114.
 Cord Reel, each, \$2.50



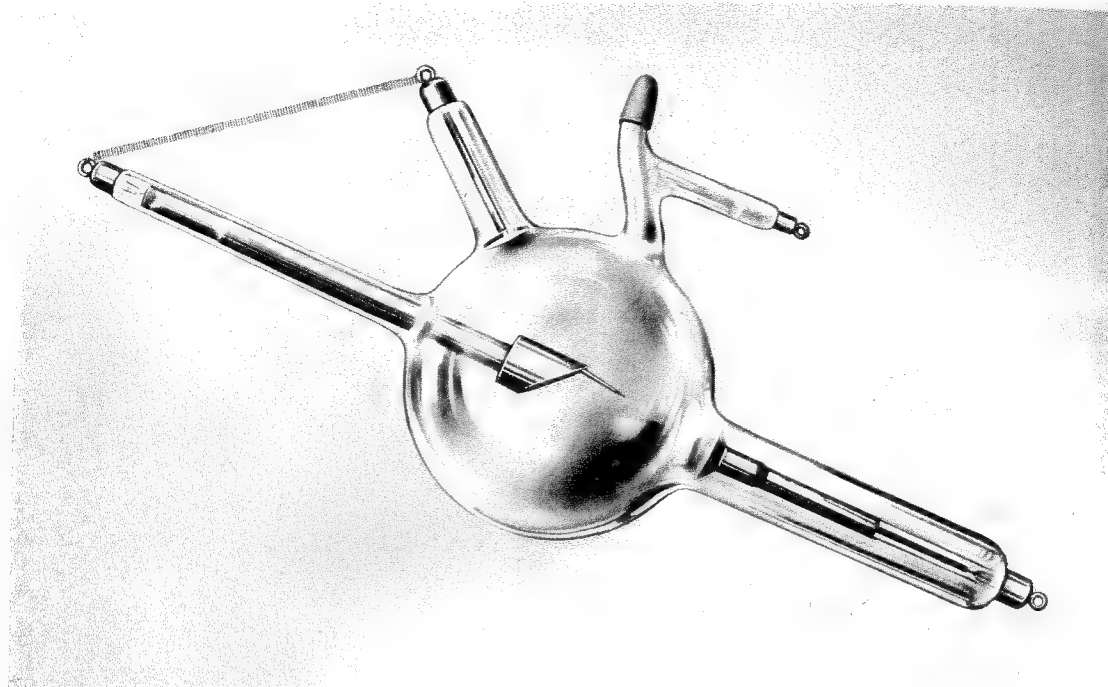
No. 113. Self-Adjusting Electrolytic Interrupter.
 Complete \$20.00



No. 115. X-Ray Milliammeter..... \$18.00

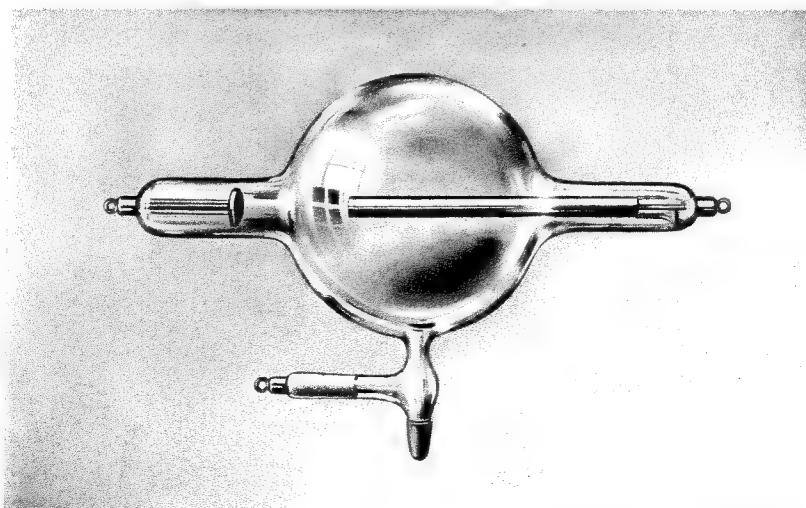


No. 116.
 Primary Resistance Unit.... \$5.00



No. 117. X-Ray Tube.

Platinum Target Tube, 6" size, \$20.00; 7" size, \$25.00
Tungsten Target Tube, 6" size, \$30.00; 7" size, \$35.00



No. 118. Valve Tube \$10.00

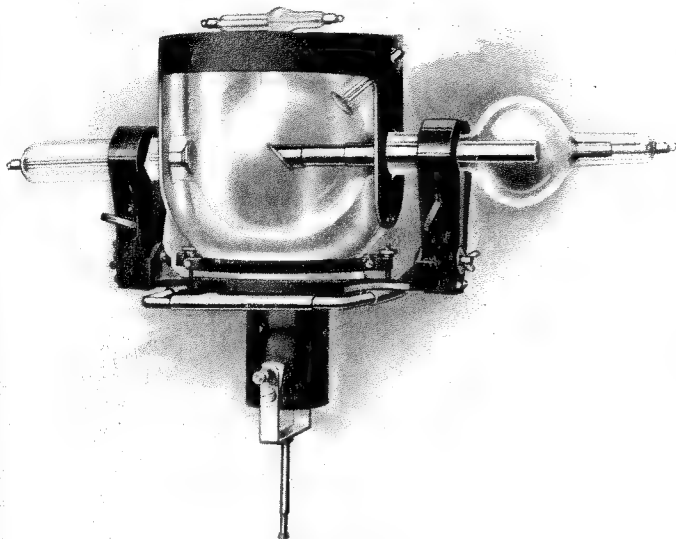


Plate No. 13.

Showing Combination X-Ray and Valve Tube, No. 119.

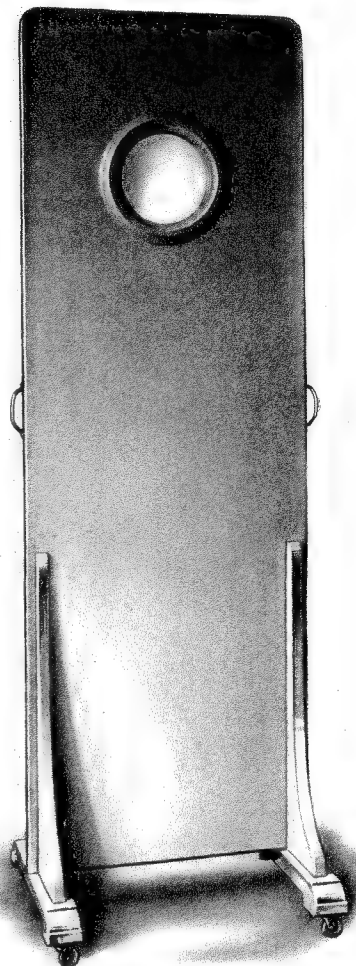
Satterlee Opaque Rubber Cover, No. 120,
and X-Ray Telescopic Pointer, No. 121.

The handle as shown here is supplied on all our tube stands.

No. 119. Combination X-Ray and Valve Tube.
Prices are \$5.00 additional to those for X-Ray Tube No. 117.

No. 120. Satterlee Opaque Rubber Cover for lead
glass tube shield \$6.00

No. 121. X-Ray Telescopic Pointer.....\$4.50



No. 122. Lead-Lined Protection Screen.

In white finish..... \$45.00

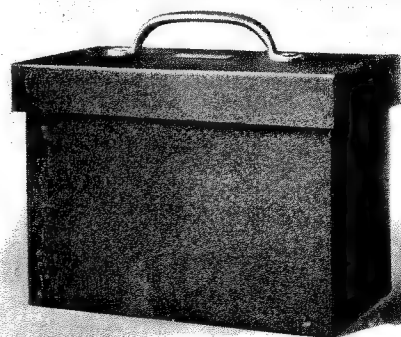
In oak finish..... \$55.00

In mahogany finish..... \$60.00

No. 123. Knife Switch Mounted
on Screen (see Plate No. 3) with
6 feet of connecting cable.. \$7.50



No. 124. Lead Glass Shield, \$10.00
Large enough for 7" tubes.



No. 125. Lead Box for Dental Films
and 4 x 5 Plates \$6.50

No. 126. Lead-Lined Box for Dental
Films and 8 x 10 Plates..... \$10.00

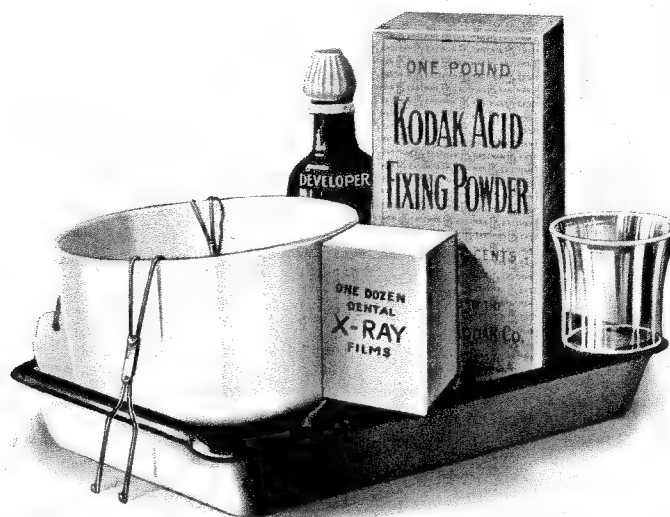


Plate No. 14.

Photographic Materials and Accessories.

No. 127.	Porcelain lined trays, 4 x 5, each \$.25; 5 x 7, each \$.50; 8 x 10, each	\$1.00
" 128.	Porcelain bowls, each.....	.10
" 129.	2-oz. glass tumblers for developing films, each.....	.10
" 130.	Brown bottle for keeping fresh developer.....	.25
" 131.	½-pint glass funnel15
" 132.	Eastman M. Q. Developer, per dozen tubes.....	.60
" 133.	Paragon Developer, per dozen boxes.....	3.00
" 134.	"Rodinal" Concentrated Liquid Developer, 16-ounce bottle.....	2.00
" 135.	Acid Fixing Powder, per dozen 1-pound boxes.....	3.00
" 136.	Dental X-Ray Films, No. 1, 1¼" x 1⅝", per dozen pairs.....	.75
	per gross pairs.....	6.00
" 137.	Dental X-Ray Films, No. 2, 1½" x 2¼", per dozen pairs.....	1.00
	6 dozen pairs.....	5.10
" 138.	Dental X-Ray Films, No. 3, 2¼" x 3", per dozen pairs.....	2.00
	3 dozen pairs.....	5.25

There are two kinds of Eastman dental X-ray films supplied by us, the "Positive" and the "Negative" film. The "Positive" film has a slow emulsion, and the "Negative" has a fast emulsion. The "Positive" is the one generally used and will be supplied where the kind is not specified.

" 139.	Paragon X-Ray Plates, 4 x 5, per dozen, \$1.00; 5 x 7, per dozen.....	\$1.65
	8 x 10, per dozen, \$3.50; 8 x 10 Screen Plates, per dozen	2.40
" 140.	Intensifying Screen, and No. 141, Cassette, 8" x 10" size.....	29.00

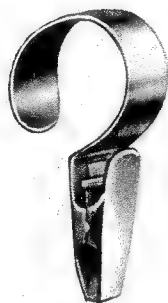


No. 142. Glass Graduate.
Double Scale, 8 oz. and
250 cc. \$.55



No. 143. Thermometer Stirring Rod..... \$.60

No. 144. Flat End Stirring Rod without Thermometer .10



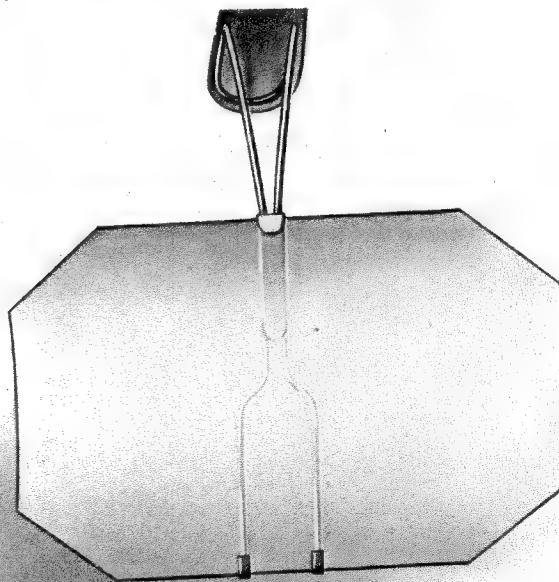
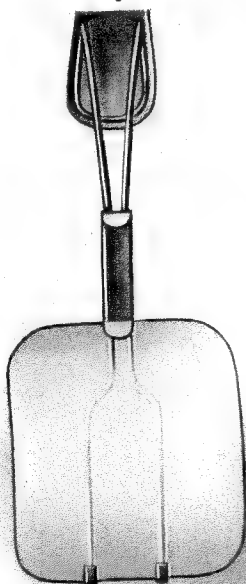
No. 145. Dental Film
Clip.

1 dozen numbered
clips \$.50



No. 146. Photo Clip,
per doz..... \$.30

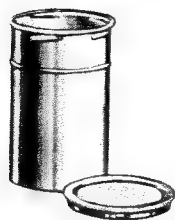
For suspending prints
to dry.



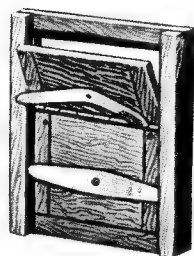
No. 147. Satterlee Dental Film Clamps, per doz..... \$2.00

Very Convenient for developing all sizes of films.

The piece of aluminum shown attached to the clamp can be marked with pencil for identifying each film when several are being developed at one time.

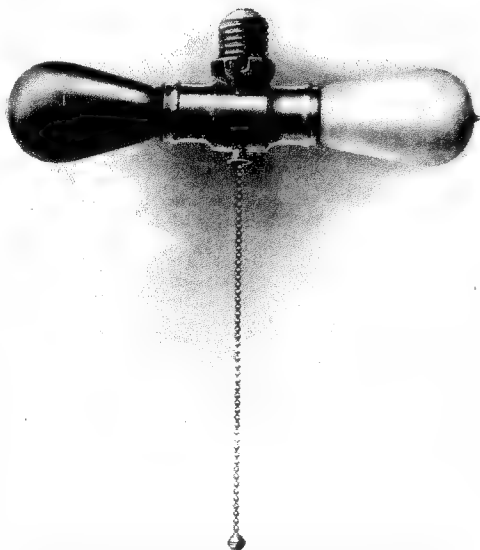


No. 148. Developing
Tank \$1.50



No. 149. Printing
Frames.

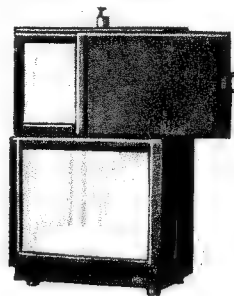
4 x 5	\$.45
5 x 750
8 x 1075



No. 153. Dark Room Frosted Ruby
and White Light \$2.75

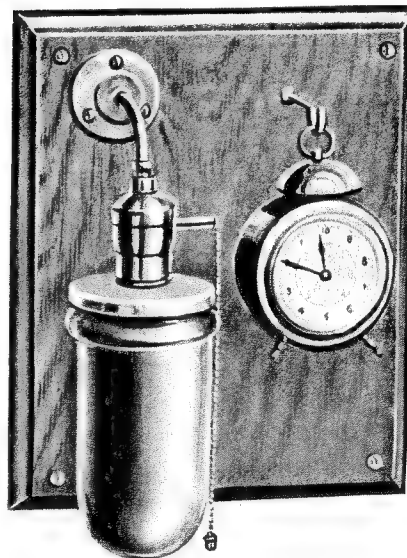


No. 150. Montauk
Ruby Incandescent
Light \$1.50



No. 151. Wratten
Safelight Lamp,
No. 1..... \$9.50

No. 152. Lamp No.
2, with no white-
light illumina-
tion \$6.50



No. 154. Dark Room Lamp and
Timer \$7.00

No. 155. Dark Room Lamp.. 3.50

No. 156. Timer 2.50



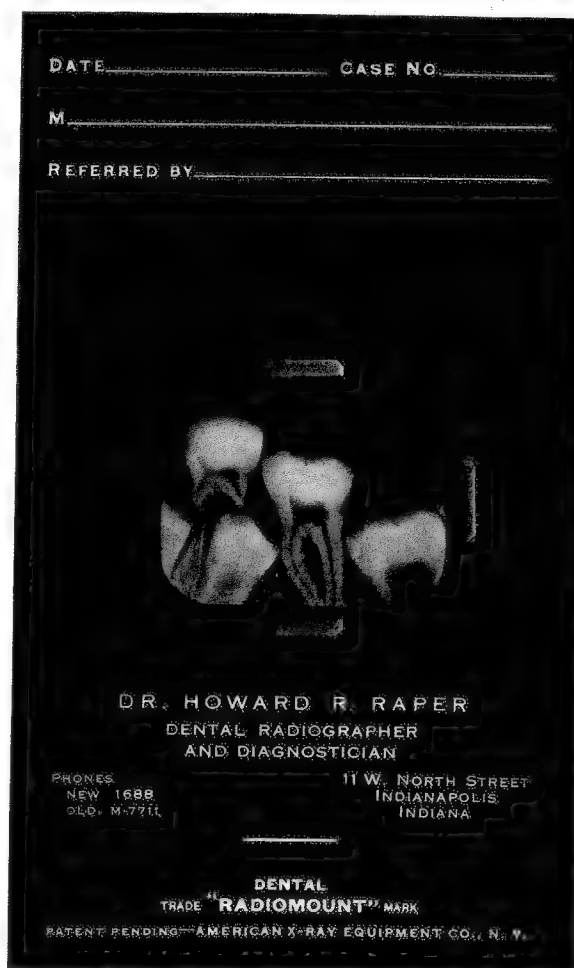
No. 157. Dark Box for Developing Dental Radiographs..... \$17.50

Used by those who have no dark room or closet available. Standard size is large enough for developing 5" x 7" plates.

The "Radiomount" is a convenient holder when viewing, and causes the X-ray picture to stand out clearly, the black card cutting off all surrounding light.

The mat finish on the celluloid backing eliminates foreign objects when viewing, and increases the detail to be seen on the X-ray film.

The "Radiomount" protects the emulsion side of the film, and



the pocket formed by the card and the celluloid backing holds the film securely.

The size of the "Radiomount" is 3" x 5" for all sizes of films, making it convenient for filing all film radiographs in a standard card index file.

The "Radiomount" with the imprinting of your card is an advertisement when sent out.

No. 158. Dental "Radiomount" for No. 1 Film

No. 159. Dental "Radiomount" for No. 2 Film

No. 160. Dental "Radiomount" for No. 3 Film

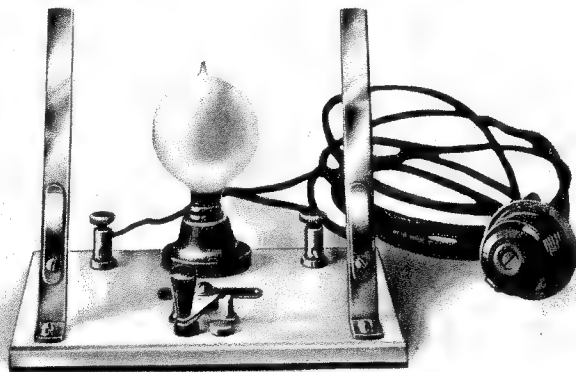
Price List.

Quantity	For No. 1 Film 1½ x 1½	For No. 2 Film 1½ x 2¼	For No. 3 Film 2¼ x 3	Imprinting of name, address, telephone number
100	\$3.00	\$3.50	\$4.00	\$1.65
200	5.50	6.50	7.50	2.00
500	13.00	15.25	17.50	3.00
1,000	25.00	29.25	33.50	3.75

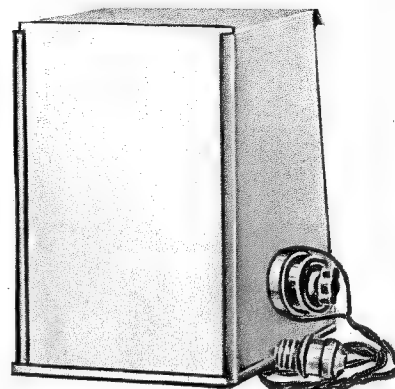
The price list for radiomounts for holding two No. 1 films on each mount is the same as for radiomounts for No. 3 films. Envelopes printed for recording useful data are supplied with the radiomounts without extra charge.

No. 161. Small bottle of white ink..... \$.15

No. 162. 3 x 5 size Standard Card Index File..... 10.00



No. 163. Dental X-Ray Film Illuminator, \$4.00



No. 164. View Box for 8 x 10 plates \$7.50

No. 165. View Box for "Radiomounts" and 4 x 5 plates, \$5.50

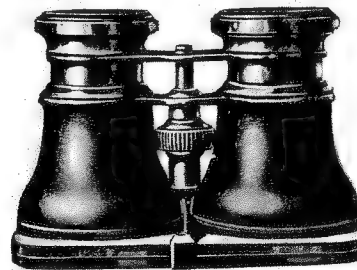
Nos. 163 and 165 are small and light enough to be placed on your table bracket.
Enables you to view the radiograph while working on the patient's tooth.



No. 166. Dental Radioscope, \$6.00

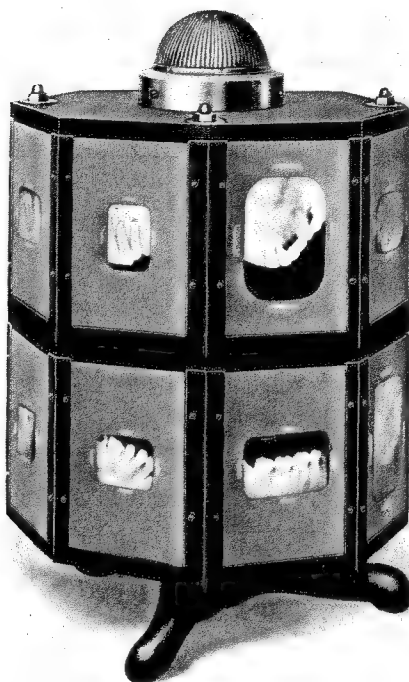
For viewing films and 4 x 5 plates.

Brings out the fine detail in the radiograph by excluding all surrounding light.



No. 167. Small Dental Film Stereoscope \$8.00

This instrument enables one to view the teeth in perspective.



No. 168. Revolving Dental X-Ray Film
Illuminator, complete \$22.50

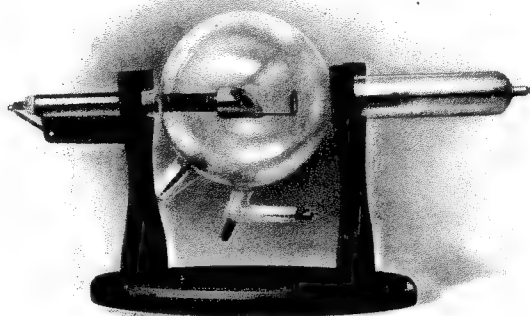
Diameter, 10".

Total height, 18".

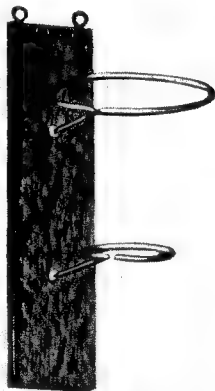
Furnished on tripod base or wall bracket.

Standard size holds 16 "Radiomounts."

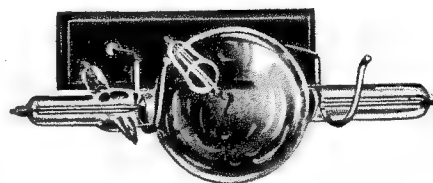
This enables you to show a variety of interesting and instructive cases. Just the thing to have in your office or waiting room.



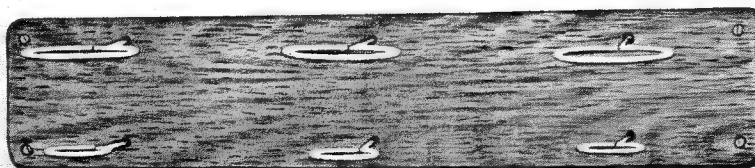
No. 169. X-Ray Tube Hanger....\$4.00



No. 170. Wall X-Ray
Tube Rack.... \$1.25



No. 171. Wall X-Ray Tube
Hanger \$1.25

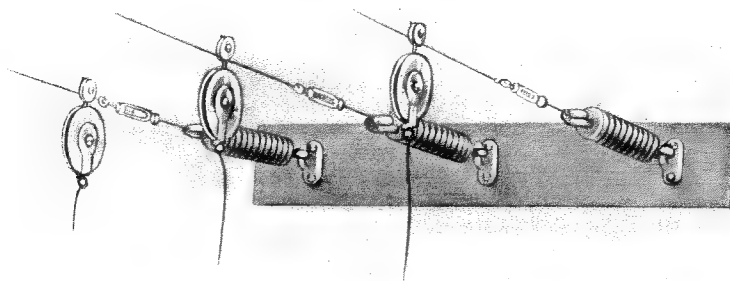


No. 172. Wall Rack to hold three tubes..... \$3.00

BOOKS

No. 173. Dental Radiology, 200 pp., by Dr. Francis LeRoy Satterlee, Jr..... \$3.00

No. 174. Elementary and Dental Radiography, 318 pp., by Dr. Howard R. Raper \$5.00



Overhead Trolley System.

A convenient way of connecting X-ray tube in circuit.

No. 175. Three line trolley..... \$17.00

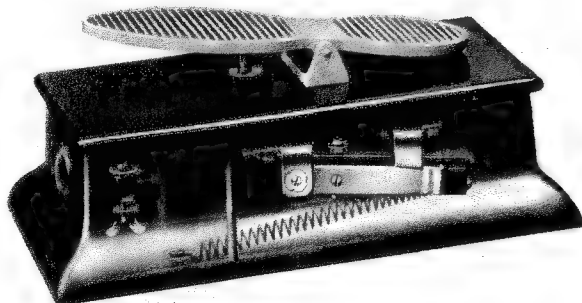
No. 176. Two line trolley..... \$12.00

Trolley wire is not included in these prices, but will be furnished in any length at 3 cents per foot.



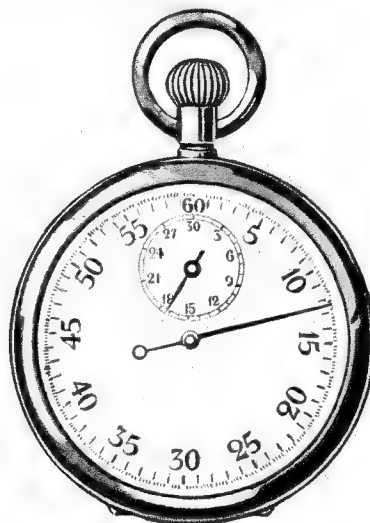
No. 177. Specialist's Chair \$30.00

Supplied with or without arms.
Equipped with castors.



No. 179. Foot Switch..... \$20.00

Will break any current up to 60 amperes.



No. 178. Stop Watch.... \$10.00



No. 180. Oscilloscope..... \$2.00

Shows the presence of "inverse" current in an X-ray tube.

SELECTION OF OUTFIT

THE various models of X-ray cabinets and tube stands designed by us meet the different space conditions existing in dental offices. We shall be pleased to assist you in selecting the equipment most suitable for your office. If not convenient for you to call at our sales rooms send us a sketch showing the plan of the office in which you intend to have your X-ray machine. We can then suggest a suitable outfit and the best arrangement for it. For those who have absolutely no floor space for the use of an X-ray outfit, we have designed a dental X-ray machine and tube holder which can be mounted on the wall. Our apparatus is supplied at no extra charge in any finish that will harmonize with the color scheme in your office. All our designs are made attractive, so that our outfits look well in any dental office.

The following equipments, "A," "B," and "C," are listed simply as suggestions to give you an idea of the cost of a few different complete equipments, including all accessories, and to help you to select an equipment meeting your own particular requirements.

For those who wish a low priced but efficient outfit we suggest:—

Equipment "A"

No. 103.	Standard model "S" 8" X-ray coil machine...	\$225.00
No. 108.	Dental X-ray tube stand.....	65.00
No. 119.	6" platinum target combination X-ray and valve tube	25.00
	Dark room equipment and photographic materials.....	15.00
		<hr/>
		Complete equipment.... \$330.00

If tube holder No. 105, mounted on cabinet, is selected instead of tube stand No. 108, the entire equipment comes to \$300.00.

For those who desire a moderate priced outfit with our more powerful coil we suggest:—

Equipment "B"

No. 101.	Model "L," or No. 102, Model "M," 12"	
	X-ray coil machine.....	\$290.00
No. 109.	Counter-weighted X-ray tube stand.....	85.00
No. 117.	7" tungsten target X-ray tube.....	35.00
	Dark room equipment and photographic materials.....	25.00
No. 126.	Lead-lined box for films and 8" x 10" plates..	10.00
		<hr/>
		Complete equipment.... \$445.00

For those who desire the most complete dental X-ray outfit we suggest:—

Equipment "C"

No. 101.	Model "L," or No. 102 Model "M" 12"	
	X-ray coil machine.....	\$290.00
No. 110.	Schamberg model counter-weighted X-ray tube stand	125.00
Two (2) No. 117	7" tungsten target X-ray tubes at \$35.00	70.00
	Dark room equipment and photographic materials.....	30.00
One (1) extra No. 118	valve tube.....	10.00
No. 180.	Oscilloscope	2.00
No. 172.	Rack to hold three tubes.....	3.00
No. 122.	Lead-lined screen with No. 123 knife switch mounted on it (price in white finish).....	52.50
No. 126.	Lead-lined box for films and plates.....	10.00
No. 178.	Stop watch	10.00
		<hr/>
		Total.... \$602.50

To this may be added complete exhibiting and viewing instruments as follows:

"Radiomounts," 200 No. 158, 100 No. 159, and 100	
No. 160	\$13.00
No. 163. Revolving dental X-ray film illuminator.....	22.50
No. 165. X-ray plate view box for 8 x 10 plates.....	7.50
No. 166. X-ray plate view box for 4 x 5 plates and "Radiomounts"	5.50
No. 168. Dental Radioscope	6.00
No. 169. Small dental film Stereoscope.....	8.00
<hr/>	
Total....	\$62.50

This would bring the price of the most complete equipment to \$665.00

SIMPLICITY OF OPERATION

EASE and simplicity of operation are strong features of our dental outfit, and therefore the technique required is simple and easily learned. This is true also of the developing of the films and plates. The busy dentist will find it a great convenience to have his office assistant take the radiographs and develop them.

Any dentist in less than a month can take satisfactory radiographs with our outfit. Expert skill comes with practice if care is given to details. A very complete set of directions for installing and operating our X-ray machines go with each outfit.

The result is that the radiographs taken by the users of our outfits compare favorably with the work done by X-ray specialists.

SERVICE DEPARTMENT

WE wish the users of our dental outfits to derive at all times the maximum amount of satisfaction and benefit from the use of the X-ray, and we have established a Service Department to render

assistance in every possible way to those who may need it. As our Service Department is in charge of an experienced radiologist we are in a position also to assist the dentist who purchases our apparatus in the interpretation of his radiographs.

It is our desire to keep in touch as much as possible with our Customers. In this way we try to help them, and we are helped by receiving suggestions for improvements or for making new and useful apparatus. It is this close co-operation with dentists who use the X-ray that enables us to remain the leaders in the manufacture of dental radiographic equipment.



T E R M S

WHEN ordering please refer to catalog numbers as much as possible. If it is an X-ray machine that you are ordering, state whether the current is direct or alternating and its voltage. State also the finish desired: white, mahogany, or oak.

Our apparatus may be ordered through any reliable dental dealer or direct from us. In the latter case the terms are cash with order or C. O. D., and a discount of five per cent. is allowed from the catalog prices. All shipments F. O. B. factory. Where special crating for foreign shipment is necessary a slight extra charge is made.

In the absence of definite instructions we will use our own judgment as to transportation companies and method of shipment. Small packages are generally sent by parcel post, or express; heavy apparatus by express or freight, depending upon distance and other conditions.

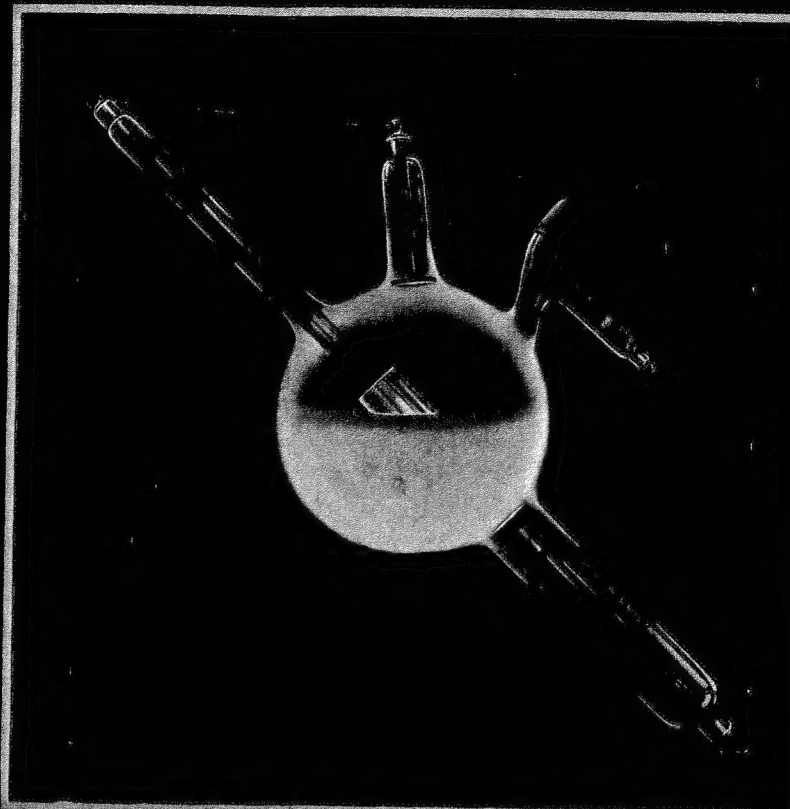
Every machine is tested before shipment, and packing is done by experienced and competent employees, every means being taken to insure safe transit. Our responsibility ends with the delivery of the goods in good condition to the transportation company.

The goods supplied on your order may differ slightly from the illustrations, owing to improvements which are constantly made wherever possible.

We agree to make free of charge any repairs that may be required, due to defective material or workmanship, within one year from date of purchase.

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DENTAL X-RAY APPARATUS

**AMERICAN X-RAY
EQUIPMENT COMPANY**